

PATENT  
USSN 09/721,506  
002616US; 018-210c

CLAIM AMENDMENTS

1 to 72. *Cancelled*

73. *(Withdrawn) (Currently amended)* A synthetic or recombinant telomerase reverse transcriptase (TRT) protein that contains a sequence that is at least 80% identical to the full length of SEQ. ID NO:2, and has telomerase catalytic activity when complexed with a telomerase RNA.

74. *Cancelled*

75. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes a telomerase reverse transcriptase (TRT) protein, or the exact complement of said nucleic acid sequence;  
wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 80% identical to the full length of SEQ. ID NO:2.

76. *(Previously presented)* The polynucleotide of claim 75, comprising a promoter sequence operably linked to the sequence that encodes the protein.

77. *(Previously presented)* An isolated cell comprising the recombinant polynucleotide of claim 75.

78. *(Previously presented)* The cell of claim 77, which is a eukaryotic cell.

79. *Cancelled*

80. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 75.

81. *(Withdrawn) (Currently amended)* A synthetic or recombinant TRT protein that contains a sequence that is at least 90% identical to the full length of SEQ. ID NO:2, and has telomerase catalytic activity when complexed with a telomerase RNA.

82. *Cancelled*

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83. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes ~~an TRT~~ a TRT protein, or the exact complement of said nucleic acid sequence,  
wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 90% identical to the full length of SEQ. ID NO:2.
84. *(Currently amended)* The polynucleotide of claim 83, comprising a promoter sequence operably linked to the sequence that encodes ~~the protein, variant or fragment~~ said TRT protein.
85. *(Previously presented)* An isolated cell comprising the recombinant polynucleotide of claim 83.
86. *(Previously presented)* The cell of claim 85, which is a eukaryotic cell.
87. *Cancelled*
88. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 83.
89. *(Withdrawn)* A synthetic or recombinant TRT protein that contains a sequence that is at least 80% identical to 500 contiguous amino acids in SEQ. ID NO:2, wherein the protein has reverse transcriptase activity when complexed with a telomerase RNA.
90. *Cancelled*
91. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes ~~an TRT~~ a TRT protein, or the exact complement of said nucleic acid sequence,  
wherein said TRT protein has telomerase catalytic activity when complexed with a telomerase RNA; and contains an amino acid sequence that is at least 80% identical to 500 contiguous amino acids in SEQ. ID NO:2.
92. *(Currently amended)* The polynucleotide of claim 91, comprising a promoter sequence operably linked to the sequence that encodes ~~the protein, variant or fragment~~ said TRT protein.
93. *(Previously presented)* An isolated cell comprising the recombinant polynucleotide of claim 91.
94. *(Previously presented)* The cell of claim 93, which is a eukaryotic cell.

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95. *Cancelled*

96. *(Withdrawn)* A method of increasing the proliferative capacity of a cell, comprising expressing in the cell a polynucleotide according to claim 91.

97 to 100. *Cancelled*

101. *(Previously presented)* The polynucleotide of claim 75, wherein said TRT protein contains a sequence that is at least 95% identical to 100 contiguous amino acids in SEQ. ID NO:2.

102. *(Previously presented)* The polynucleotide of claim 75, wherein said TRT protein contains a sequence that is at least 98% identical to 100 contiguous amino acids in SEQ. ID NO:2.

103. *(Previously presented)* The polynucleotide of claim 75, wherein said TRT protein contains a sequence that is at least 95% identical to 500 contiguous amino acids in SEQ. ID NO:2.

104. *(Previously presented)* The polynucleotide of claim 75, wherein said TRT protein contains a sequence that is at least 98% identical to 500 contiguous amino acids in SEQ. ID NO:2.